

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A primary battery, comprising:
a cathode comprising
an oxide containing an alkali metal and pentavalent bismuth, the alkali metal being lithium or potassium, and
an electrochemically active cathode material different from the oxide;
an anode;
a separator between the cathode and the anode; and
an alkaline electrolyte.
2. (Currently amended) The battery of claim 1, wherein the oxide is ~~LiBiO₃, Li₃BiO₄, Li₅BiO₅, Li₇BiO₆, Li₄Bi₂O₇, Li₅Bi₃O₁₀ or KBiO₃~~ comprises a material selected from the group consisting of MBiO₃, M₃BiO₄, M₇BiO₆, M₄Bi₂O₇, and M₅Bi₃O₁₀, where M is Li, Na, K, Rb and/or Cs; Li₅BiO₅; and Li₆KBiO₆; Li₆RbBiO₃.
3. (Original) The battery of claim 1, wherein the oxide comprises an electrically conductive portion.
4. (Original) The battery of claim 3, wherein the electrically conductive portion is an electrically conductive surface coating comprising carbon or a metal oxide.
5. (Original) The battery of claim 4, wherein the electrically conductive surface coating comprises a material selected from the group consisting of graphite, carbon black,

acetylene black, cobalt oxide, cobalt oxyhydroxide, silver oxide, silver nickel oxide, nickel oxyhydroxide, and indium oxide.

6. (Original) The battery of claim 1, wherein the anode comprises zinc.
7. (Original) The battery of claim 1, wherein the electrolyte comprises lithium hydroxide, sodium hydroxide, or potassium hydroxide.
8. (Original) The battery of claim 1, wherein the separator is capable of preventing soluble bismuth species from diffusing from the cathode to the anode.
9. (Original) The battery of claim 1, wherein the separator is capable of trapping soluble bismuth species.
10. (Currently amended) A primary battery, comprising:
a cathode comprising
an oxide containing an alkaline earth metal and pentavalent bismuth, and
an electrochemically active cathode material different from the oxide;
an anode;
a separator between the cathode and the anode; and
an alkaline electrolyte.
11. (Original) The battery of claim 10, wherein the alkaline earth metal is selected from the group consisting of magnesium, calcium, strontium, and barium.
12. (Currently amended) The battery of claim 10, wherein the oxide is MgBi_2O_6 , $\text{Sr}_2\text{Bi}_2\text{O}_7$, or $\text{Ba}_2\text{Bi}_2\text{O}_6$ comprises a material selected from the group consisting of MgBi_2O_6 .

SrBi₂O₆, Sr₂Bi₂O₇, LiSr₃BiO₆, NaSr₃BiO₆, (Ba,K)BiO₃, (Sr,K)BiO₃, Li₂Ba₅Bi₂O₁₁, and Ba₂Bi₂O₆.

13. (Original) The battery of claim 10, wherein the oxide comprises an electrically conductive portion.

14. (Original) The battery of claim 13, wherein the electrically conductive portion is an electrically conductive surface coating comprising carbon or a metal oxide.

15. (Original) The battery of claim 14, wherein the electrically conductive surface coating comprises a material selected from the group consisting of graphite, carbon black, acetylene black, cobalt oxide, cobalt oxyhydroxide, silver oxide, silver nickel oxide, nickel oxyhydroxide, and indium oxide.

16. (Original) The battery of claim 10, wherein the oxide comprises cobalt oxyhydroxide and MgBi₂O₆.

17. (Original) The battery of claim 10, wherein the anode comprises zinc.

18. (Original) The battery of claim 10, wherein the electrolyte comprises lithium hydroxide, sodium hydroxide, or potassium hydroxide.

19. (Original) The battery of claim 10, wherein the oxide further comprises an alkali metal.

20. (Original) The battery of claim 10, wherein the separator is capable of preventing soluble bismuth species from diffusing from the cathode to the anode.

21. (Original) The battery of claim 10, wherein the separator is capable of trapping soluble bismuth species.

22. (Currently amended) A primary battery, comprising:
a cathode comprising
an oxide containing a metal and pentavalent bismuth, the metal being a main group metal, a lanthanide or a transition metal ~~other than silver~~, and
an electrochemically active cathode material different from the oxide;
an anode;
a separator between the cathode and the anode; and
an alkaline electrolyte.

23. (Currently amended) The battery of claim 22, wherein the metal is selected from the group consisting of scandium, vanadium, manganese, iron, cobalt, nickel, copper, silver, zinc, yttrium, zirconium, niobium, molybdenum, ruthenium, palladium, cadmium, tantalum, and tungsten.

24. (Original) The battery of claim 22, wherein the metal is selected from the group consisting of lanthanum, cerium, praseodymium, neodymium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, and ytterbium.

25. (Original) The battery of claim 22, wherein the metal is selected from the group consisting of indium, tin, antimony, and lead.

26. (Original) The battery of claim 22, wherein the oxide further comprises an alkali metal or an alkaline earth metal.

27. (Currently amended) The battery of claim 22, wherein the oxide is ~~ZnBi₂O₆, Cu₂Bi₂O₇, CdBi₂O₆, or Sr₂SeBiO₆~~ comprises a material selected from the group consisting of ZnBi₂O₆, Cu₂Bi₂O₇, CdBi₂O₆, AgBiO₃, Ag₂₅Bi₃O₁₈, Ba₂YBiO₆, Ba₂LaBiO₆, Sr₂NdBiO₆, Ba₂InBiO₆, Ba(Bi,Pb)O₃, Sr₁₈Ru_{1.9}Bi_{4.1}O₃₃, Li₈PdBi₂O₁₀, and Sr₂ScBiO₆.

28. (Original) The battery of claim 22, wherein the oxide comprises an electrically conductive portion.

29. (Original) The battery of claim 28, wherein the electrically conductive portion is an electrically conductive surface coating comprising carbon or a metal oxide.

30. (Original) The battery of claim 29, wherein the electrically conductive surface coating comprises a material selected from the group consisting of graphite, carbon black, acetylene black, cobalt oxide, cobalt oxyhydroxide, silver oxide, silver nickel oxide, nickel oxyhydroxide, and indium oxide.

31. (Original) The battery of claim 22, wherein the oxide comprises cobalt oxyhydroxide and ZnBi₂O₆.

32. (Original) The battery of claim 22, wherein the anode comprises zinc.

33. (Original) The battery of claim 22, wherein the electrolyte comprises lithium hydroxide, sodium hydroxide, or potassium hydroxide.

34. (Original) The battery of claim 22, wherein the separator is capable of preventing soluble bismuth species from diffusing from the cathode to the anode.

35. (Original) The battery of claim 22, wherein the separator is capable of trapping soluble bismuth species.

36-41. Canceled

42. (New) The battery of claim 1, wherein the electrochemically active cathode material is selected from the group consisting of manganese dioxide, NiOOH, AgO, AgNiO₂, and AgCoO₂.

43. (New) The battery of claim 1, wherein the electrochemically active cathode material comprises manganese dioxide.

44. (New) The battery of claim 1, wherein the electrochemically active cathode material comprises NiOOH.

45. (New) The battery of claim 10, wherein the electrochemically active cathode material is selected from the group consisting of manganese dioxide, NiOOH, AgO, AgNiO₂, and AgCoO₂.

46. (New) The battery of claim 10, wherein the electrochemically active cathode material comprises manganese dioxide.

47. (New) The battery of claim 10, wherein the electrochemically active cathode material comprises NiOOH.

48. (New) The battery of claim 10, wherein the oxide comprises MgBi₂O₆, and the electrochemically active cathode material comprises NiOOH.

49. (New) The battery of claim 22, wherein the electrochemically active cathode material is selected from the group consisting of manganese dioxide, NiOOH , AgO , AgNiO_2 , and AgCoO_2 .

50. (New) The battery of claim 22, wherein the electrochemically active cathode material comprises manganese dioxide.

51. (New) The battery of claim 22, wherein the electrochemically active cathode material comprises NiOOH .

52. (New) The battery of claim 22, wherein the oxide comprises AgBiO_3 , and the electrochemically active cathode material comprises manganese dioxide.